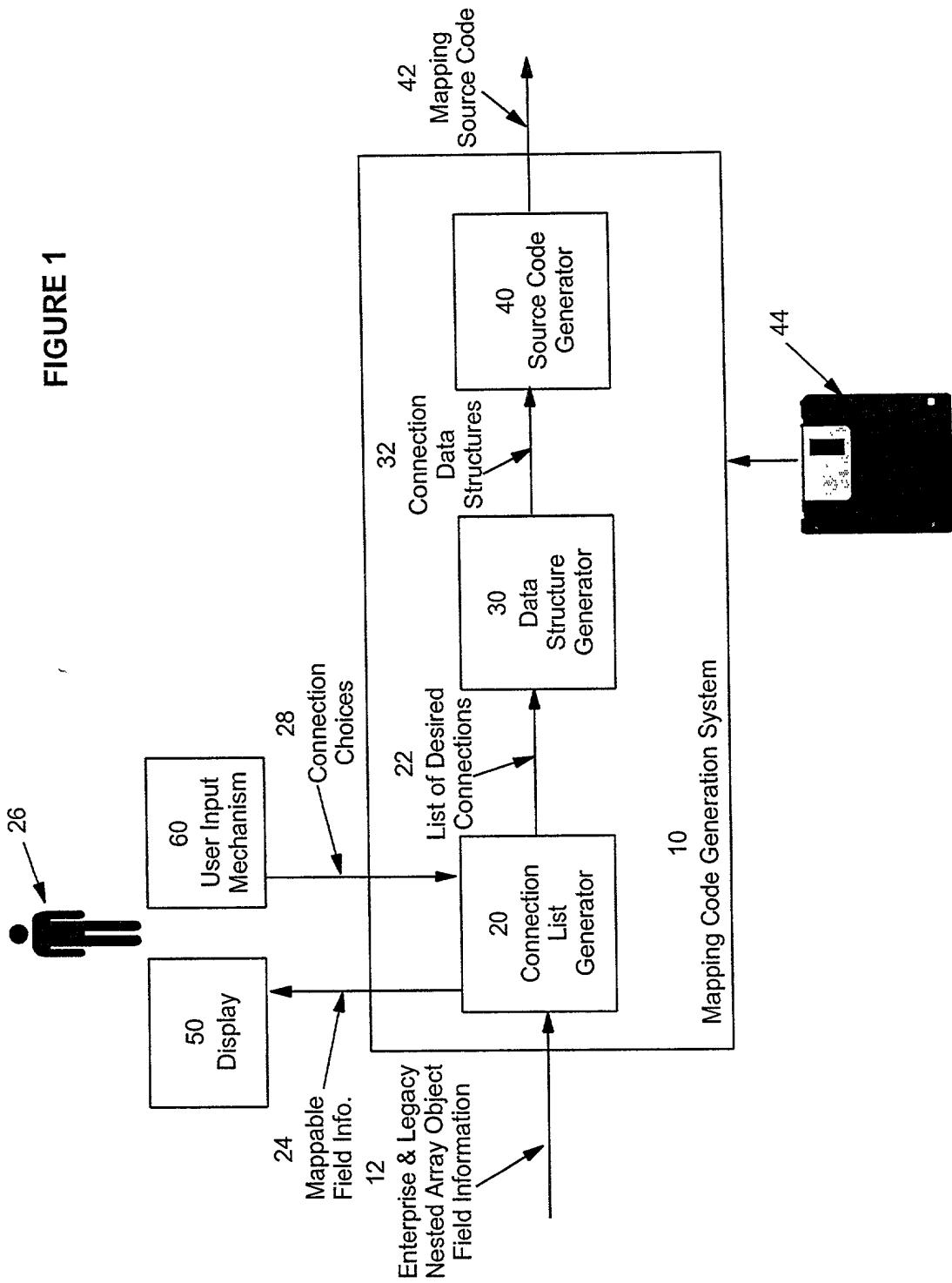


FIGURE 1



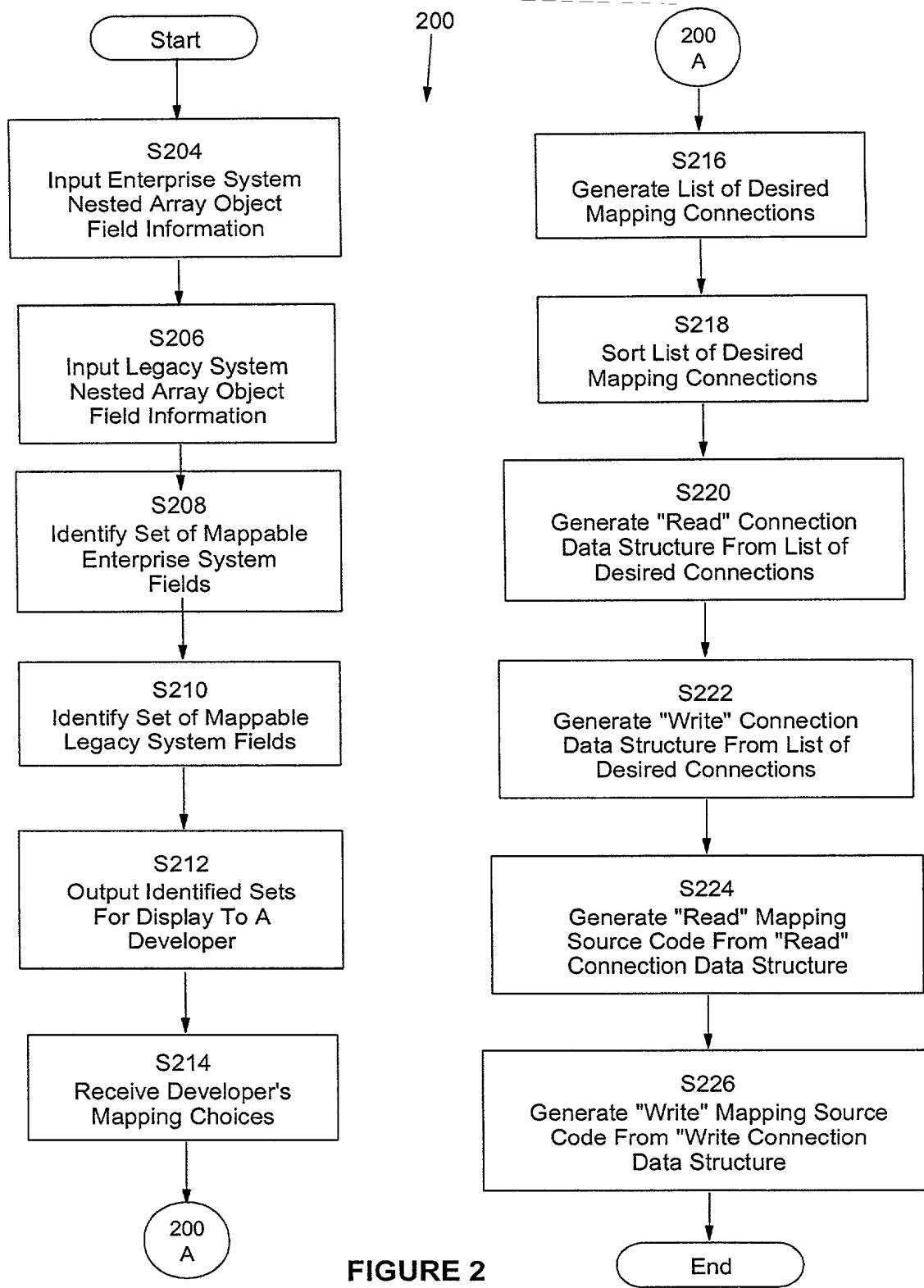


FIGURE 2

Enterprise System Field Information:

```
1  public class Site {  
2      public static final int MAXBUILDINGS = 2;  
3      public static final int MAXMEETINGROOMS = 12;  
4      public static final int MAXDEPARTMENTS = 50;  
5      public static final int MAXEMPLOYEES = 1000;  
6      private Building buildings[] =  
7          new Building[MAXBUILDINGS];  
8  }  
9  
10 public class Building {  
11     private MeetingRoom meetingRooms[] =  
12         new MeetingRoom[Site.MAXMEETINGROOMS];  
13     private Department departments[] =  
14         new Department[Site.MAXDEPARTMENTS];  
15 }  
16  
17 public class MeetingRoom {  
18     private int size;  
19     private int location;  
20 }  
21  
22 public class Department {  
23     private int deptNumber;  
24     private String deptName;  
25     private Employee employees[] =  
26         new Employee[Site.MAXEMPLOYEES];  
27 }  
28  
29 public class Employee {  
30     private int empNumber;  
31     private String empName;  
32 }
```

FIGURE 3A

Legacy System Field Information:

```
1  :
2  private Bldg legacyBldgs[] =
3      new Bldg[Constants.MAXLEGACYBLDG];
4  :
5
6  public class Constants{
7      public static final int MAXLEGACYBLDG = 2;
8      public static final int MAXLEGACYROOMS = 4;
9      public static final int MAXLEGACYDEPTS = 50;
10     public static final int MAXLEGACYEMPLS = 1000;
11 }
12
13 public class Bldg {
14     private Room legacyRooms[] =
15         new Room[Constants.MAXLEGACYROOMS];
16     private Dept legacyDepts[] =
17         new Dept[Constants.MAXLEGACYDEPTS];
18 }
19
20 public class Room {
21     private String legacyLocn;
22     private int legacySize;
23 }
24
25 public class Dept {
26     private String legacyDeptName;
27     private int legacyDeptNum;
28     private Empl legacyEmpls[] =
29         new Empl[Constants.MAXLEGACYEMPLS];
30 }
31
32 public class Empl {
33     private String legacyName;
34     private int legacyNumber;
35 }
```

**FIGURE 3B**

FIGURE 4

Enterprise System Field	Connection Directionality	Legacy System Field
410 Site.buildings [ ]. meetingRooms [ ]. location	400b ↓ ↔	400c legacyBldgs [ ]. legacyRooms [ ]. legacyLocn
420 Site.buildings [ ]. meetingRooms [ ]. size	↓ ↔	legacyBldgs [ ]. legacyRooms [ ]. legacySize
430 Site.buildings [ ]. departments [ ]. employees [ ]. emp Number	↓ ↔	legacyBldgs [ ]. legacyDepts [ ]. legacyEmps [ ]. legacyNumber

400

FIGURE 5A

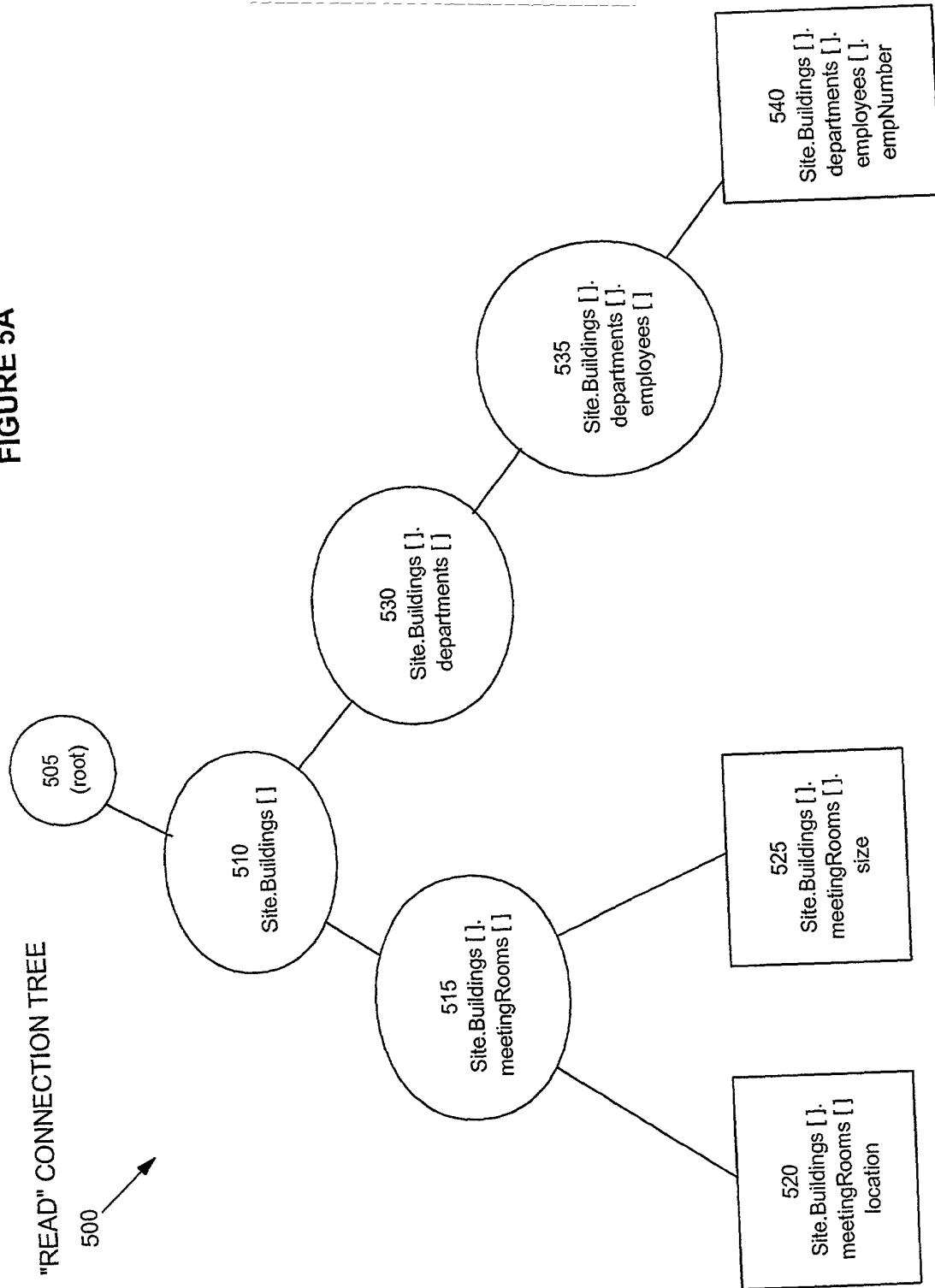
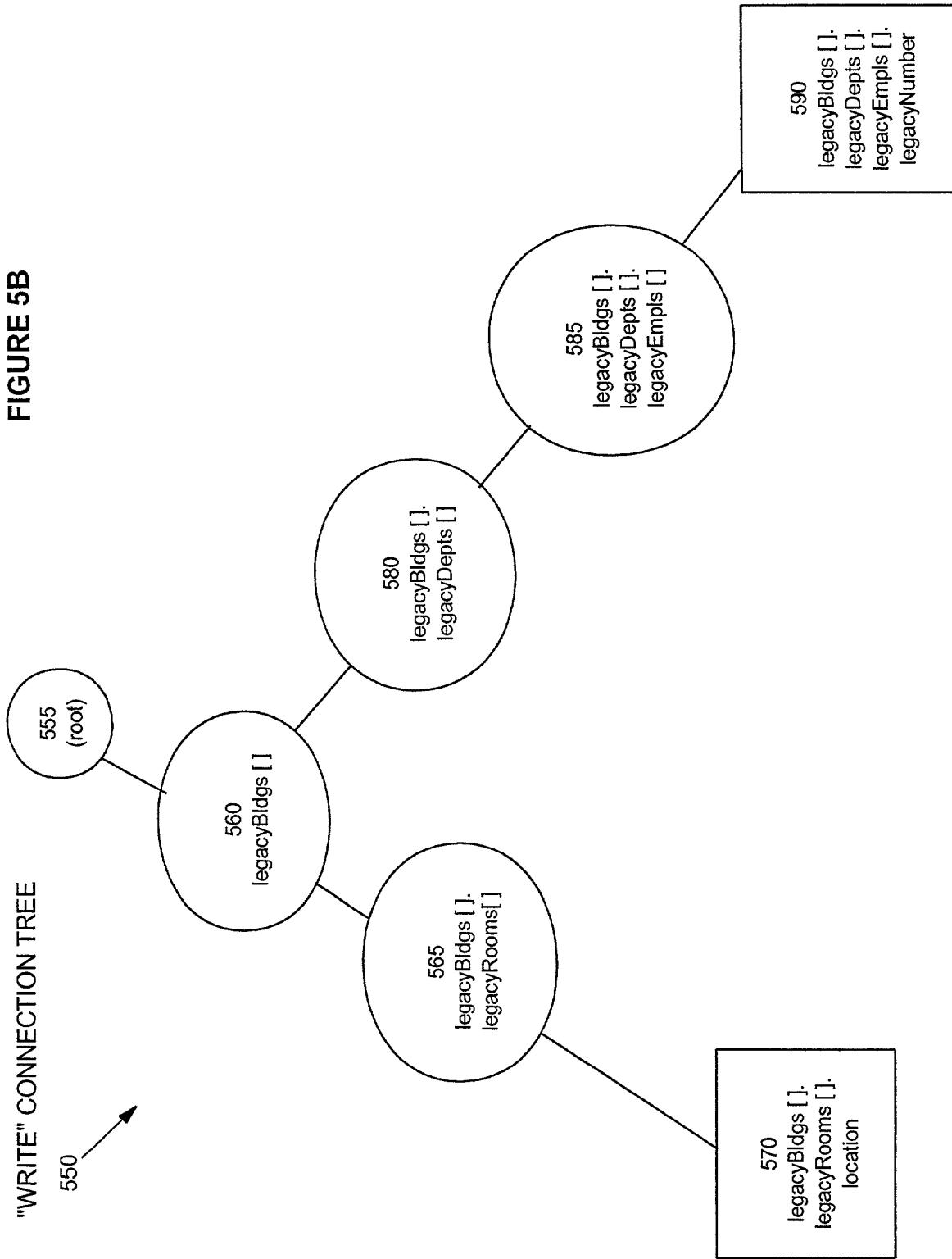


FIGURE 5B

## "WRITE" CONNECTION TREE



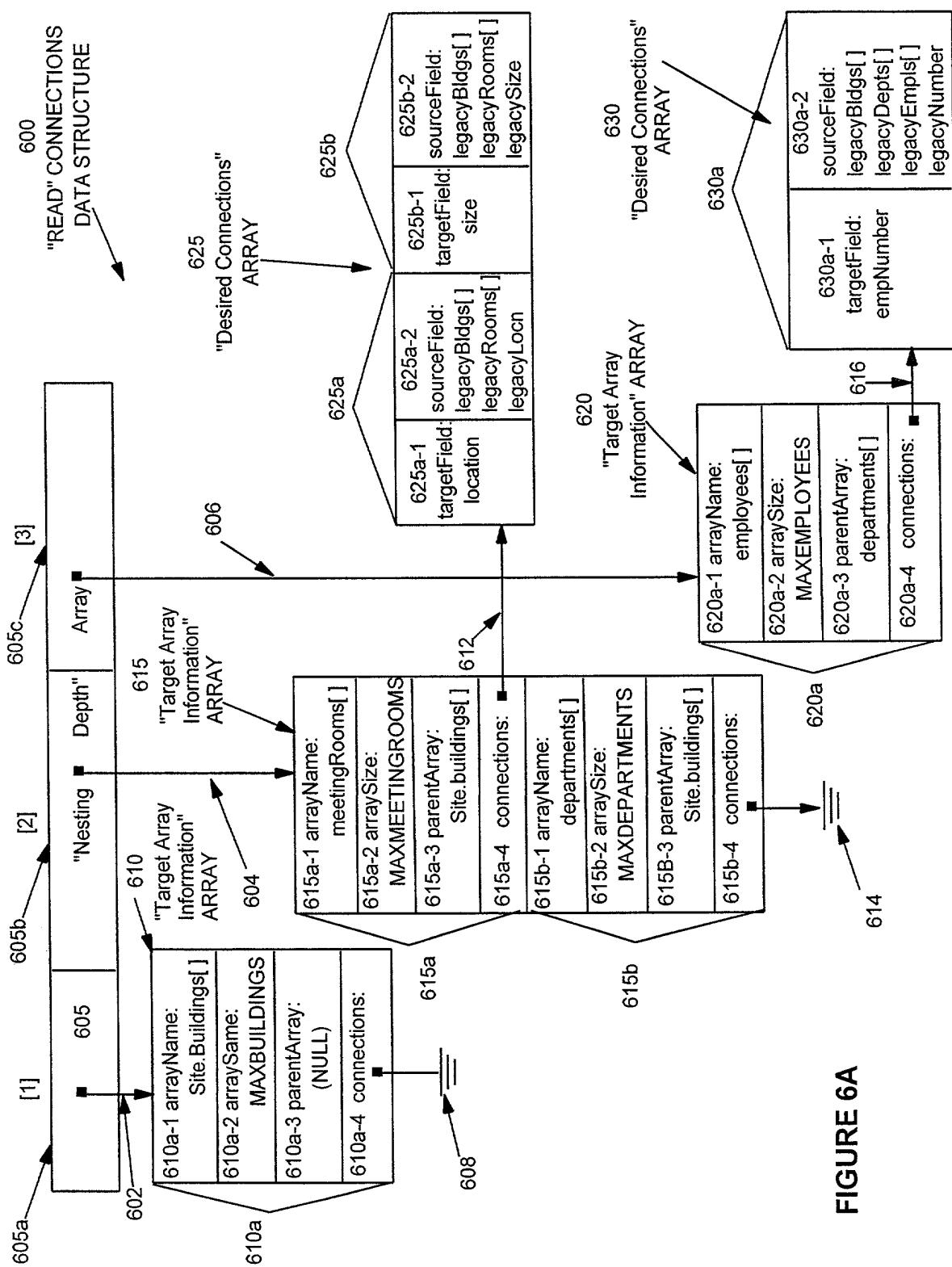
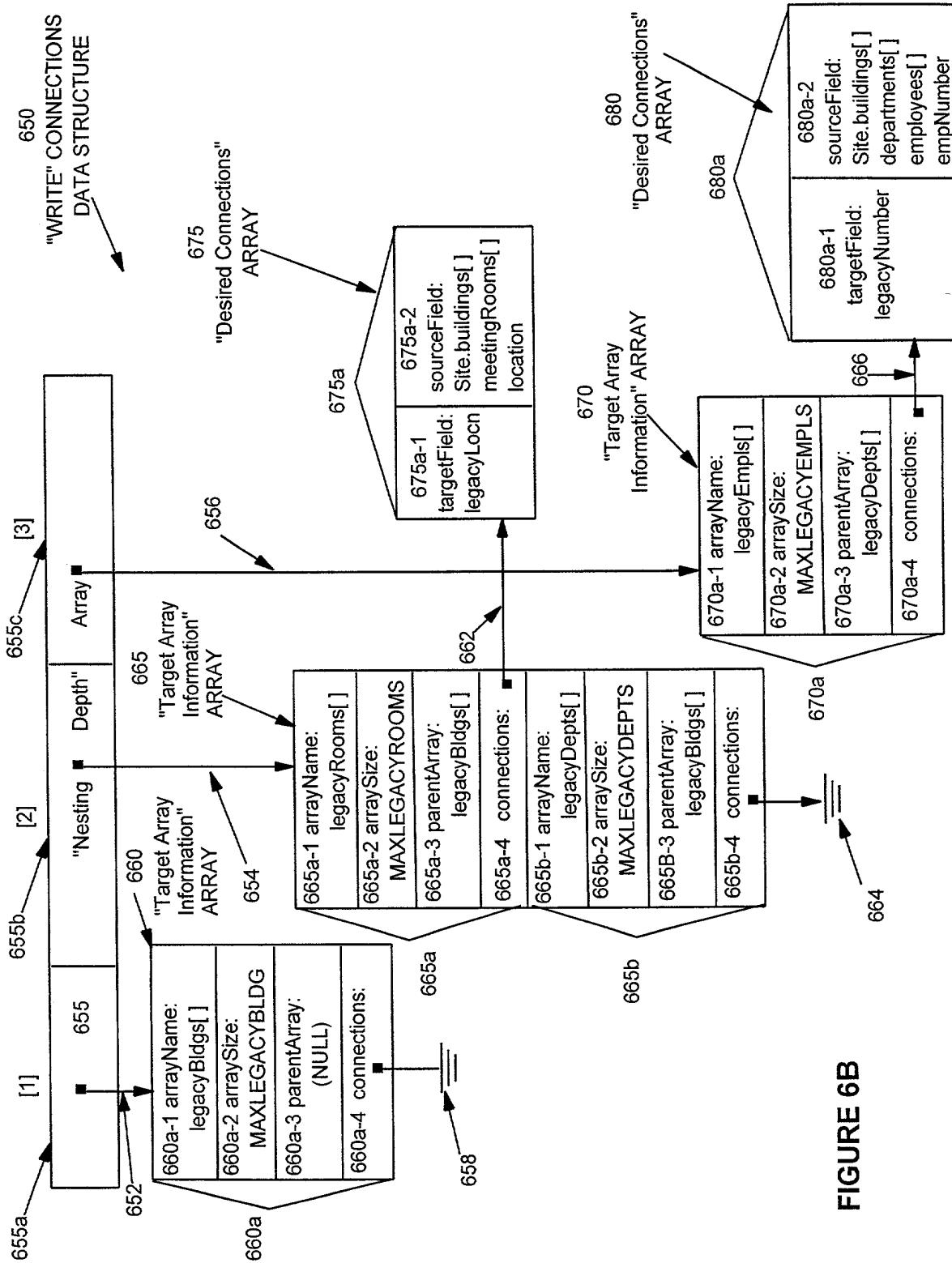


FIGURE 6A



## FIGURE 6B

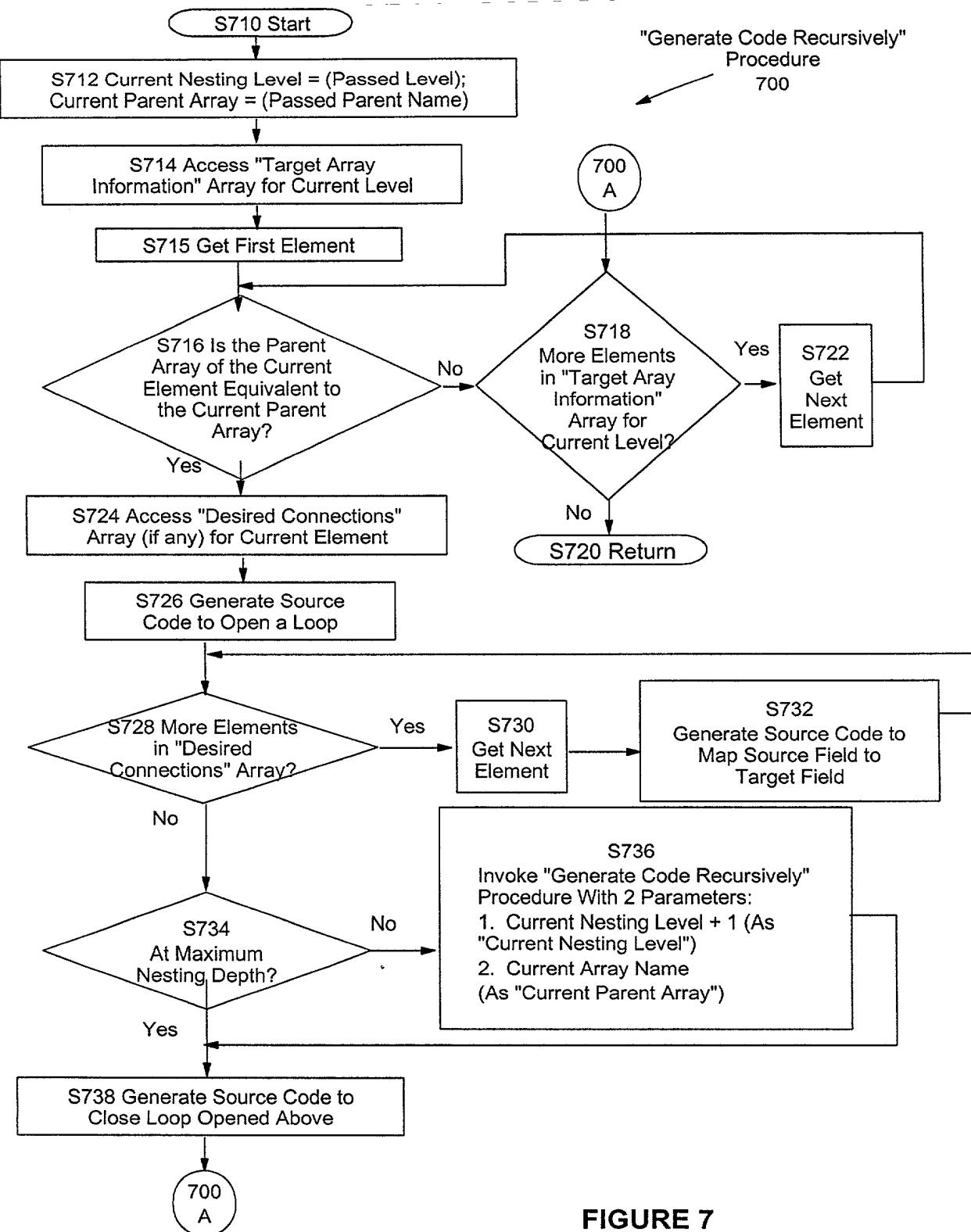


FIGURE 7

Generated "Read" Mapping Code:

```
1 for (i=0;i< MaxBldgs; i++)  
2 {  
3   for (j=0;j<MaxRooms;j++)  
4 {  
5     Site.buildings[i].meetingRooms[j].location =  
6       APIgetLegacyData(legacyBldgs[i].legacyRooms[j].legacyLocn);  
7  
8     Site.buildings[i].meetingRooms[j].size =  
9       APIgetLegacyData(legacyBldgs[i].legacyRooms[j].legacySize);  
10 }  
11 for (j=0; j< MaxDepts;j++)  
12 {  
13   for (k=0; k< MaxEmpls;k++)  
14 {  
15     Site.buildings[i].departments[j].employee[k].empNumber =  
16       APIgetLegacyData(legacyBldgs[i].legacyDepts[j].  
17       legacyEmpls[k].legacyNumber);  
18 }  
19 }  
20 }
```

**FIGURE 8A**

Generated "Write" Mapping Code:

```
1 for (i=0;i< MaxLegacyBldgs; i++)
2 {
3     for (j=0;j<MaxLegacyRooms;j++)
4     {
5         APIsetLegacyData(legacyBldgs[i].legacyRooms[j].legacyLocn,
6             Site.buildings[i].meetingRooms[j].location);=
7     }
8     for (j=0; j< MaxLegacyDepts; j++)
9     {
10        for (k=0; k< MaxLegacyEmpls; K++)
11        {
12            APIsetLegacyData(
13                legacyBldgs[i].legacyDepts[j].legacyEmpls[k].legacyNumber,
14                Site.buildings[i].departments[j].employee[k].empNumber;
15        }
16    }
17 }
```

**FIGURE 8B**